

REMARKS

Claim Status

Claims 1-8 remain in the application.

Claims 9-26 have been withdrawn.

Claims 1, 5, 6, 7 and 8 have been amended.

Claim Rejection- 35 USC §102

Claims 1-3, 5-6 and 8 have been rejected under 35 USC § 102 (e) as anticipated by WO 01/50121 for disclosing a method for removing a gelatinous material by separating a gel, placing the cut gel in a new container and covering the gel cutting with an equilibrating fluid.

Applicants have amended claim 1 to insert "said gel cutting containing a plurality of concentration points of different substances" which is supported in paras. [0002], [0011], [0039] and [0050] of the specification. The other amendments found in claims 1 and 5-7 are supported in paras. [0031] and [0020].

The result of the method according to amended claim 1 is a gel cutting which is immobilized within a chamber of a gel holder in such a way that a plurality of concentration points, e.g. a plurality of single protein spots, in the immobilized gel can be excised by an automated process.

The purpose of the apparatus disclosed by the '121 reference is to allow retrieval of samples, e.g. protein spots, of a gel layer without cross-contamination from previously excised samples. This apparatus comprises a support platform, a support translation member for moving the platform along the X and Y axes, a cutter member, a cutter

translation member for moving the platform along the Z axis and a controller to control the movement of the platform along the X, Y and Z axes. The '121 reference describes a method and the above apparatus for selecting and excising single protein spots but not for separating a gel cutting, i.e. a slice which contains many single protein spots, from a gel layer as is the case in the instant invention. This is apparent in particular from the method steps described by Figures 4-6 of the '121 reference which show gel imaging and cutting routes where one cutting tip is used to cut single protein spots. The first routine of the reference is the positioning of the gel on the support platform. The '121 reference contains no disclosure of how the gel is obtained and positioned on the support platform.

The disclosure of the '121 reference cited by the Examiner on pgs. 2-3 of the Office Action refers to the retrieval of a sample from the gel layer, e.g. a single protein spot, by means of a gel cutting tip after the gel has been positioned on the platform. The retrieved gel sample is placed in, e.g. a multi well plate for further processing (ref. p.5, lines 8 et seq.). The transfer of the excised gel sample from the gel in a multi-well plate does not correspond to the second step of the method of claim 1 since the term "gel cutting" as used in the present invention refers to a cutting of a gel layer or gel slice from which small gel samples containing, e.g. a probe of interest, are excised later on, but not to the small samples excised from the gel cutting. For the above reasons Applicants do not believe that the '121 reference anticipates the present invention.

Claim Rejection- 35 USC § 103

Claims 4 and 7 have been rejected under 35 USC § 103 as unpatentable over WO 01/50121 in view of Moi et al. (US Patent 5,938,906). The Examiner states that the '121 reference teaches a method for removing a gelatinous material but not holding the gel in the processing well by clamping means or covering the gel with an equilibrating fluid before cutting. The Examiner further states that the '906 reference teaches clamps for holding a gel in place and that the covering a pre-cut gel with a processing fluid to prepare the gel for cutting is well known in the art of electrophoresis.

Applicants traverse this basis of rejection.

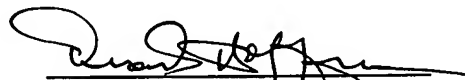
The '121 reference has been previously discussed. The '906 reference describes a gel electrophoresis casting cassette and a method for casting a gel in a horizontal electrophoresis cassette (column 2 line 6 et seq.) The gel casted in the casting cassette can then be used for the separation of biological molecules, such as, DNA.

The present invention however is directed to the positioning of a cutting of a gel layer in a gel holder in order to immobilize the gel cutting. The '906 reference discloses a totally different subject matter. The combination of the '902 and '121 references do not render the present invention obvious since neither document suggest a method for the immobilization of a gel in a gel holder.

In view of the above amendments and remarks, it is submitted that claims 1-8 are patentable in view of the cited art. Early reconsideration and allowance of the claims is respectfully requested.

No further fee is required in connection the filing of this Amendment. If any additional fees are deemed necessary, authorization is given to charge the amount of any such fee to Deposit Account No. 08-2525.

Respectfully submitted,



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